IN THE MATTER OF

MAINE YANKEE	) SITE LOCATION OF DEVELOPMENT
Wiscasset, Lincoln County	) AMENDMENT
INDEPENDENT SPENT FUEL STORAGE INSTALLATION	)
L-17973-26-P-A (Approval)	) FINDINGS OF FACT AND ORDER

Pursuant to the provisions of 38 M.R.S.A. Sections 481 et seq., the Board of Environmental Protection has considered the modification application of MAINE YANKEE with its supportive data, the information and comments submitted by the intervenors, the agency review comments, comments from the general public, the testimony at the public hearing, and other related materials on file and FINDS THE FOLLOWING FACTS:

1. PROJECT DESCRIPTION:

A. History: In Department Order #L-17973-26-A-N, dated May 21, 1992, the Department issued a permit under the Site Location of Development Law ("Site Law") approving the expansion of the Maine Yankee Nuclear Power Plant facility located on the Old Ferry Road. Since 1992 the Department of Environmental Protection ("Department") has issued a number of orders approving modifications to the development. On May 4, 1999 the Department received an application for a modification of the Site Law permit to construct an independent spent fuel storage installation ("ISFSI") on the site. Maine Yankee also filed an application for a permit under the Natural Resources Protection Act to alter 4,780 square feet of wetland in the course of construction of this project. That application is eligible for consideration as a Tier I application under the Natural Resources Protection Act, 38 M.R.S.A. Section 480-X. The Board assumed jurisdiction of the applications. Intervenor status was granted to the Town of Wiscasset and the Friends of the Coast-Opposing Nuclear Pollution.

On September 15, 1999 Maine Yankee filed a lawsuit in the United States District Court, the District of Maine, challenging the Board's and the Department's jurisdiction over this project. On May 4, 2000, the Court ruled that the federal government, in the form of the Nuclear Regulatory Commission, has retained jurisdiction over the radiological, health, and safety aspects of spent nuclear fuel storage, and that the State of Maine, through this Board, is therefore preempted from exercising its regulatory authority over those issues. The Court found that the non-radiological aspects of spent fuel storage are subject to state regulation. In this order the Board applies the licensing criteria of the Site Law only with regard to the non-radiological potential impacts of the proposed project. On May 10, 2000 the Board held a public hearing in Wiscasset to receive testimony concerning the applications.

B. Summary: The ISFSI will be built at elevation 33 feet above mean sea level ("msl"). The proposed project includes a security/operations building, security fencing, an earthen berm, security lighting, cask pads and 64 storage casks for spent nuclear fuel and greater than class C wastes ("GTCC"), all as shown on a set of engineering site plans the first of which is entitled "ISFSI Site Location Plan," prepared by Stone & Webster Engineering Corporation, dated March 24, 2000. The existing low-level waste storage building will remain on-site and will be converted to a security/operations building. A double row of 8-foot high nuisance and 12-foot high security fencing will enclose the site. A 12.5 foot high landscaped earthen berm rising to an elevation of 45 feet above msl will partially enclose the site. Sixty four storage casks are proposed; 60 for spent fuel and four for GTCC. There will be 57 casks that measure approximately 17 feet, 5 inches in height, and 7 casks that measure approximately 18 feet, 2 inches in height. All the casks are approximately 11 feet, 4 inches in diameter.

2. FINANCIAL CAPACITY:

The total cost of the project is estimated to be$64.3 million. The majority of that cost, $55.98 million, relates to radiological items. The balance, $8.32 million, is for non-radiological items such as the concrete pads and the berm. The project will be funded through the Maine Yankee Decommissioning Fund, which is reimbursed for ISFSI costs from the Spent Fuel Fund. The assets of the Decommissioning Fund ($213 million as of December 31, 1998) are sufficient to cover the costs of the project. In addition, the ability of Maine Yankee to bill the sponsor companies for these costs is guaranteed by the applicant's power contracts, which have been approved by the Federal Energy Regulatory Commission. Sponsor companies and their respective entitlement percentages include Central Maine Power Company (38%), New England Power Company (20%), The Connecticut Light and Power Company (8%), Bangor Hydro-Electric Company (7%), Maine Public Service Company (5%), Public Service Company of New Hampshire (5%), Cambridge Electric Light Company (4%), Montaup Electric Company (4%), The Hartford Electric Company (4%), Western Massachusetts Electric Company (3%), and Central Vermont Public Service Company (2%). Maine Yankee currently bills its customers $25.6 million annually to replenish the fund. The Board finds that the applicant has sufficient financial capacity to construct the proposed project.

3. TECHNICAL ABILITY:

The applicant has provided resume information for key persons involved with the project and a chronology of its 30 year history of nuclear power generation and operational experience at this development. The Board finds that the applicant has sufficient technical ability to construct and operate the proposed project in compliance with the applicable laws.

4. NOISE:

No significant sources of noise have been identified.

5. SCENIC CHARACTER:

Fifty-seven of the proposed casks will be approximately 17 feet, 5 inches in height and seven casks will be approximately 18 feet, 2 inches in height. The casks will be constructed on a site that has a grade elevation of 33 feet above msl. An earthen berm will partially enclose the ISFSI with a maximum height of 45 feet above msl. The Board finds that given the cask height of 51 feet above msl and the berm height of 45 feet above msl, portions of the top 6 feet of the casks will be visible from outside of the berm area. The top of the casks should be screened from public viewing locations so as to minimize the visual impact of the casks in the surrounding area. The Board finds that the applicant must, prior to cask installation at the facility, submit for review and approval, a planting plan that adequately screens all portions of the cask installation.

6. WILDLIFE AND FISHERIES:

The proposed project has been reviewed by the Maine Department of Inland Fisheries and Wildlife (IF&W). In its review IF&W found no records of any known deer wintering areas, essential and/or significant wildlife habitat, or other special wildlife habitats associated with this site. Department staff inspected the site of the proposed facility on a number of occasions during the past year and have not identified any fisheries or other wildlife concerns. The Board finds that the applicant has made adequate provisions for protection of wildlife and fisheries.

7. HISTORIC SITES AND UNUSUAL NATURAL AREAS:

The project site has been reviewed by the Maine Historic Preservation Commission, which has found that the proposed project will have no effect upon any structure or site of historic, architectural, or archaeological significance as defined by the National Historic Preservation Act of 1966. A review of the Maine Natural Areas Program data base reveals no record of any known rare or unusual features on the property.

8. STORMWATER MANAGEMENT & SURFACE WATER QUALITY:

The proposed project is not within the watershed of a lake or great pond. No discharges to surface waters are proposed other than stormwater. The applicant has submitted a stormwater management plan for the site based on estimates of the predevelopment and postdevelopment runoff flows for the 2, 10, and 25 year storms using methodology outlined in “Urban Hydrology for Small Watersheds”, Technical Release #20, U.S.D.A., Soil Conservation Service. The site will be regraded and some changes to stormwater flow patterns are anticipated by altering watershed catchment areas as shown on plans entitled "Pre-Development Drainage Area" and "Post-Development Drainage Area" prepared by Stone & Webster.

Runoff from the site will be conveyed to Bailey Cove via three drainage paths. Runoff from the northerly end of the site is conveyed via an

existing storm drain. The existing flow rate through this storm drain is estimated to be 12.17 cubic feet per second ("cfs") for the 25 year storm. Due to a substantial reduction in the area (from 9.5 acres that contains significant areas that are currently graveled and impervious to only 6.0 acres of relatively pervious land) flowing to this drain after the ISFSI construction the peak flow rate will be reduced to 4.42 cfs.

A second existing storm drain conveys runoff from the south-west portion of the site to a swale also draining to Bailey Cove. Due to a reduction of the area (from 3.4 acres to only 2.5 acres) draining to this storm drain the peak flow rate will be reduced from 8.09 to 7.46 cfs. A third storm drain will be installed that will convey stormwater from within the proposed 10 acre ISFSI berm enclosure area to the Cove with a peak flow rate of 14.56 cfs.

Section 3(A) of Chapter 500 of the Board's regulations allows a variance from the requirement to control peak runoff rates if the runoff is conveyed directly to the ocean via a pipe or man-made channel. The Board finds that the project satisfies this variance provision. The stormwater management plans are outlined on sheet 0819616-EY-3A-3 prepared by Stone & Webster Engineering Corporation, dated February 3, 2000. The facility is not required to utilize measures for treating stormwater for quality because the discharges are directly into the ocean at Bailey Cove. As this area is not designated as a coastal wetland most at risk from new development, no treatment under the sliding scale TSS removal standard is necessary. The Board finds that the applicant has made adequate provisions for satisfying applicable stormwater quantity and quality standards.

9. EROSION AND SEDIMENTATION CONTROL:

The applicant has submitted an Erosion and Sedimentation Control Plan. Construction of the ISFSI will disturb 10.5 acres of land. Details of the erosion control plans are contained in plan sheet 0819616-EY-5A-2, prepared by Stone & Webster Engineering Corporation, dated February 4, 2000. The plan utilizes appropriate erosion control techniques and has been found to be acceptable in satisfying applicable standards for erosion and sedimentation controls.

10. GROUNDWATER:

The project site is not located over a sand and gravel aquifer or a significant fractured bedrock aquifer. The project does not propose any withdrawal from, or discharge to, any groundwater.

Due to the history of industrial use at this facility there may be areas of contaminated soil discovered during excavation for this project. The Department finds that the applicant must submit a soil excavation control plan within 14 days from the date of receipt of this Order for the Department’s review and approval.

11. WATER SUPPLY:

When completed, the proposed project is anticipated to use 300 gallons of water per day. Water will be supplied by the Wiscasset Water District. The applicant has submitted a letter from the district, dated April 22, 1999, indicating that they will be capable of servicing this project. The Board finds that the applicant has made adequate provisions for water supply to the project.

12. WASTEWATER DISPOSAL:

When completed, the proposed project is anticipated to discharge 300 gallons per day to the Wiscasset Sewer District's wastewater treatment facility. The applicant has submitted a letter from the Wiscasset Sewer District dated April 22, 1999 indicating that it will accept these flows. The Board finds that the District has the capacity to accept the additional flow and is in compliance with the wastewater discharge laws of the State of Maine.

13. SOLID WASTE:

The proposed project will generate approximately 140 cubic yards of stumps and grubbings. The applicant proposes to dispose of all stumps and grubbings generated on site, either by chipping or by burning, with the remainder to be worked into the soil, in compliance with Solid Waste Management Regulations of the State of Maine. The project will also generate 60 cubic yards of construction and demolition debris. All construction and demolition debris will be collected by and disposed of at the Pine Tree Waste, Inc. facility in South Portland, Maine. The facility is in compliance with Maine's Solid Waste Management Regulations.

When completed the proposed project is anticipated to generate 1.25 cubic yards of general office and other recyclable solid waste per month. All general solid wastes from the proposed project are proposed to be disposed of at the Pine Tree Waste, Inc. facility in South Portland, Maine which is currently in substantial compliance with the Solid Waste Management Regulations of the State of Maine. The Board finds that the applicant has made adequate provisions for solid waste disposal.

14. FLOODING:

The proposed project is not located within the 100 year floodway of any river or stream and is not anticipated to cause or increase flooding or cause an unreasonable flood hazard to any structure.

15. AIR QUALITY:

No significant sources of air emissions have been identified.

16. ALTERATION OF CLIMATE/WATER VAPOR:

The applicant does not anticipate any significant sources of water vapor emissions from the ISFSI. The Board finds that the proposed development

will not unreasonably alter the existing cloud cover, fog or rainfall characteristics of the area.

BASED on the above findings of fact, and subject to the conditions listed below, the Department makes the following conclusions pursuant to 38 M.R.S.A. Sections 481 et seq.:

A. The applicant has provided adequate evidence of financial capacity and technical ability to develop the project in a manner consistent with state environmental standards.

B. The applicant has made adequate provision for fitting the development harmoniously into the existing natural environment and the development will not adversely affect existing uses, scenic character, air quality, water quality or other natural resources in the municipality or in neighboring municipalities provided that prior to installation of the casks the applicant shall submit to the Bureau of Land and Water Quality for review and approval a vegetative buffer and screen plan to minimize from public viewing locations the visual impacts of the casks to the surrounding area as outlined in finding 5 above.

C. The proposed development will be built on soil types which are suitable to the nature of the undertaking and will not cause unreasonable erosion of soil or sediment nor inhibit the natural transfer of soil.

D. The proposed development meets the standards for storm water management in Section 420-D and the standard for erosion and sedimentation control in Section 420-C.

E. The proposed development will not pose an unreasonable risk that a discharge to a significant groundwater aquifer will occur.

F. The applicant has made adequate provision of utilities, including water supplies, sewerage facilities, solid waste disposal and roadways required for the development and the development will not have an unreasonable adverse effect on the existing or proposed utilities and roadways in the municipality or area served by those services.

G. The activity will not unreasonably cause or increase the flooding of the alteration area or adjacent properties nor create an unreasonable flood hazard to any structure.

THEREFORE, the Board APPROVES the application of Maine Yankee to construct an Independent Spent Fuel Storage Installation, SUBJECT TO THE FOLLOWING CONDITIONS and all applicable standards and regulations:

1. The Standard Conditions of Approval, a copy of which is attached.

2. In addition to any specific erosion control measures described in this or previous orders, the applicant shall take all necessary actions to ensure that its activities or those of its agents do not result in noticeable erosion of soils or fugitive dust emissions on the site

during the construction and operation of the project covered by this approval.

3. Prior to installation of the casks at the facility the applicant must submit to the Bureau of Land and Water Quality for review and approval a vegetative buffer and screening plan to minimize from public viewing locations the view of the top of the casks and visual impacts of the casks to the surrounding area as outlined in finding 5 above.

4. Within fourteen days of receipt of this Order, Maine Yankee must submit a soil excavation control plan for the Department's review and approval.

5. All other findings of fact, conclusions, and conditions remain as approved in Department Order L17973-26-A-N, and subsequent modification and amendment orders.

DONE AND DATED AT AUGUSTA, MAINE, THIS_____ DAY OF _____, 2000.

BOARD OF ENVIRONMENTAL PROTECTION

By: _____
JOHN TEWHEY, CHAIRMAN

PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES…

Date of initial receipt of application 5/4/99
Date of application acceptance5/25/99